FIG. 1

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FIG. 2

FIG. 3

Web Services

| Service Integration |
| Service Description |
| Web Services |
| Data Format Specifications |
| Data Representation |
| Network Protocols |

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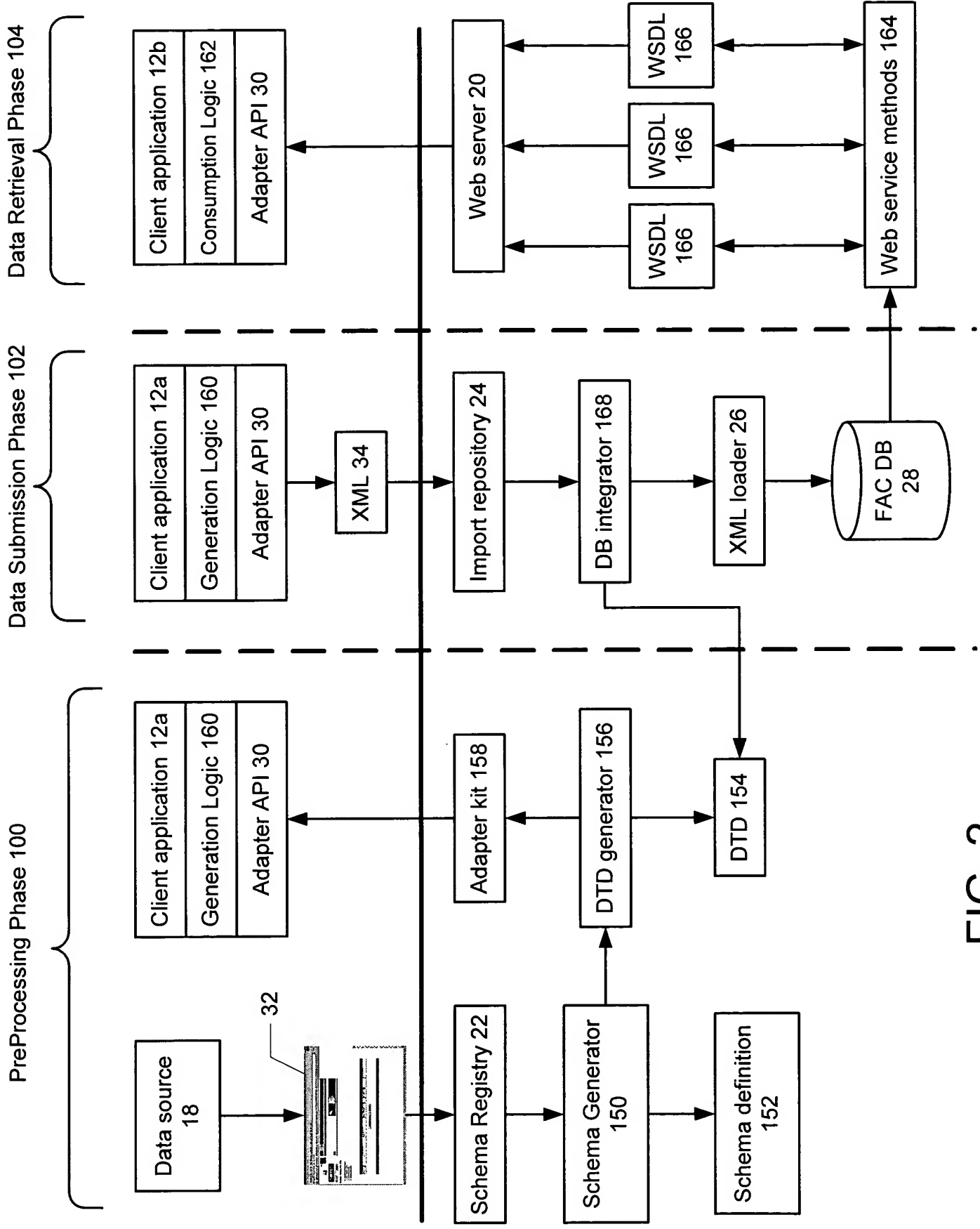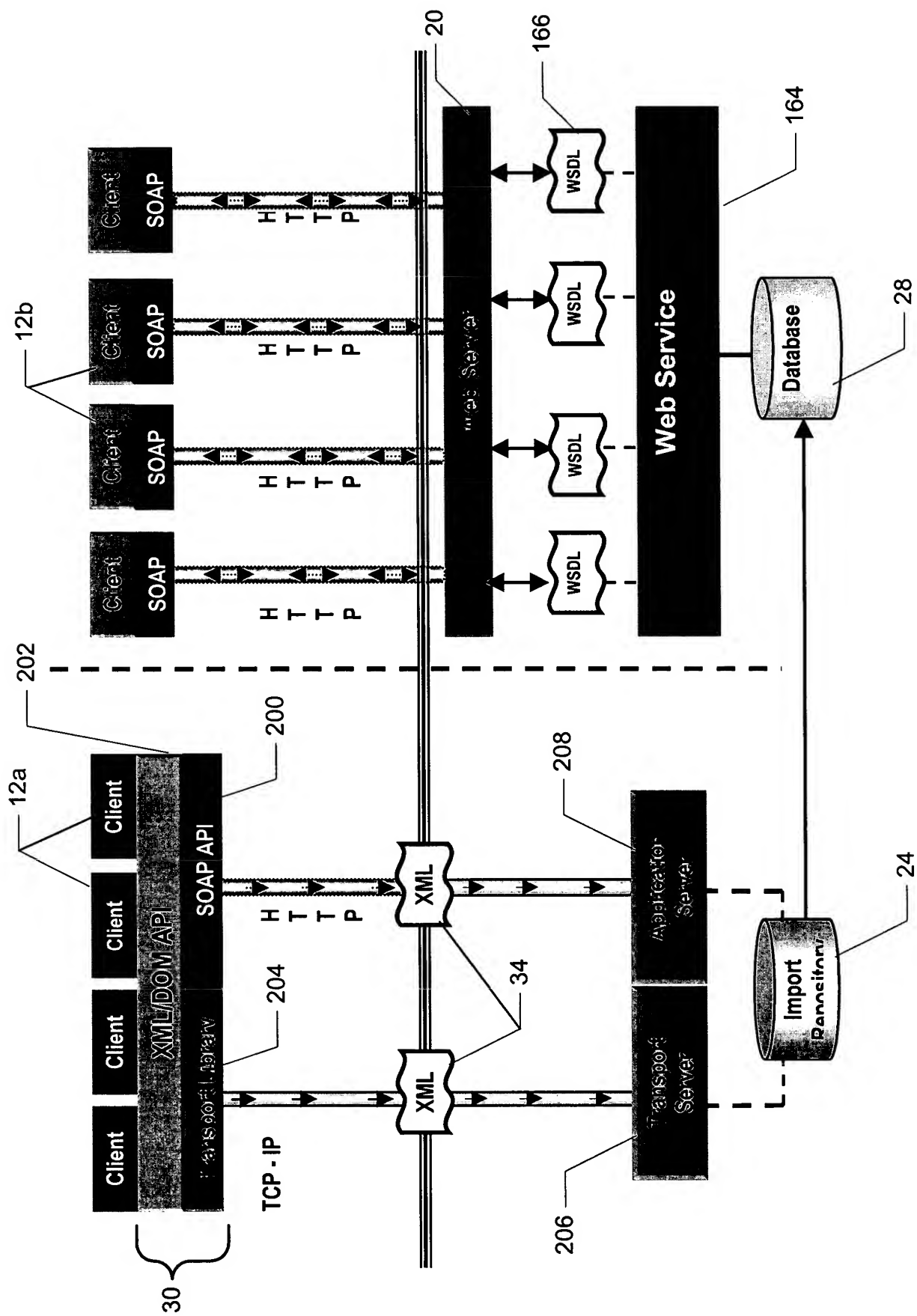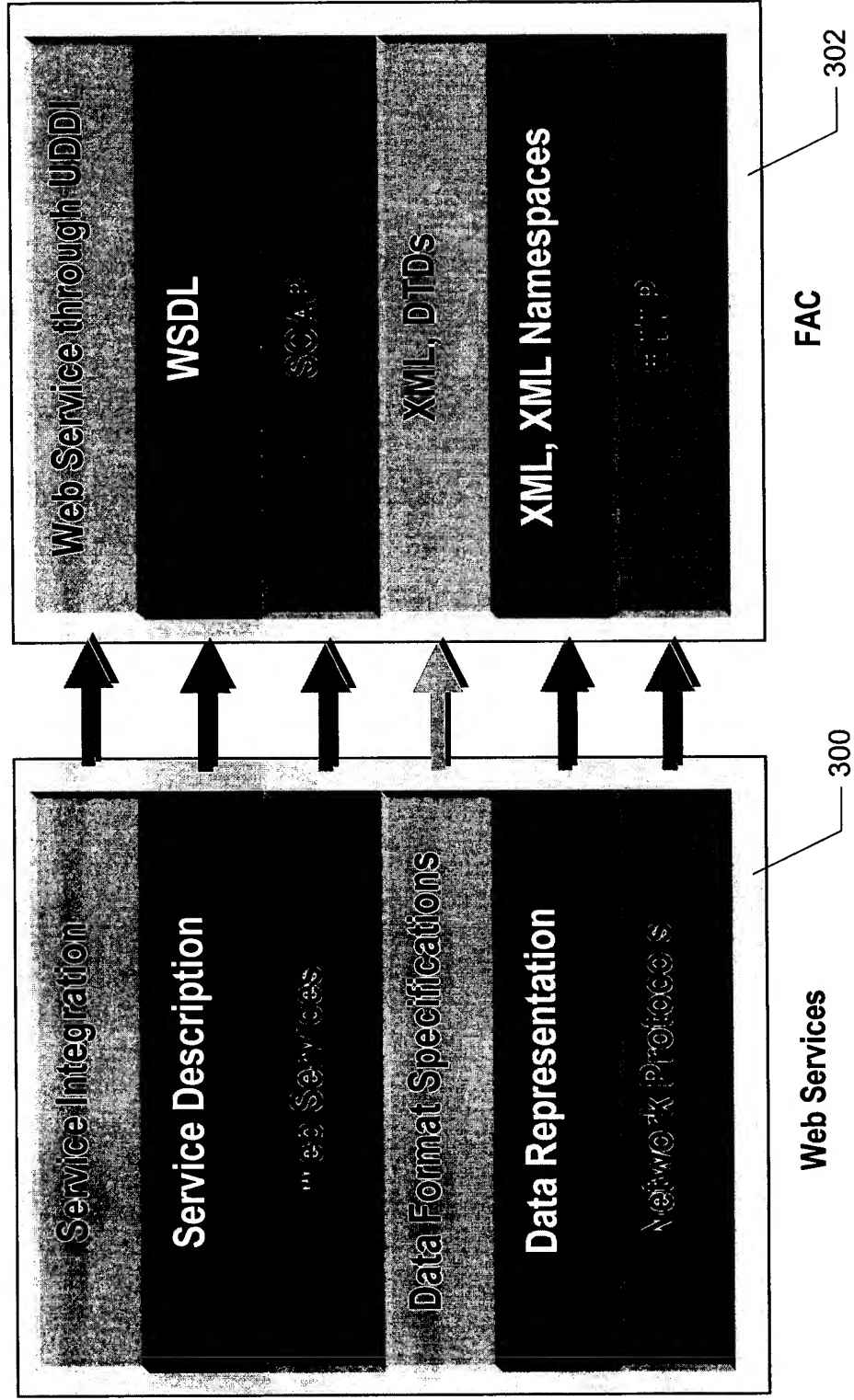| Web Service through UDDI |
| WSDL |
| SOAP |
| XML, DTDs |
| XML, XML Namespaces |
| HTTP |

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FAC

FIG. 4

FAC::Creat Doc

Arguments: None
Returns: Handle to Document Object

FAC::CreateRoot

Arguments:
    doc - Document object
    rootName - Name of the root element
Returns: Handle to Root element object

Creates the root element object and returns a handle to the object.

FAC::CreateEntity

Arguments:
    parentObj - Handle to the parent object
    elemName - Name of the new element to be created

Returns: elemObj - Handle to the created element

FAC::CreateAttribute

Arguments:
    parentObj - Handle to the parent object
    attrName - Name of the new attribute to be created
    attrValue - Value of the new attribute to be created

Returns: None

FAC::printDoc

Arguments:
    doc - Handle to the document object (The one which first got created
from CreateDoc)
    fileName - Name of the output file

Returns: None

Figure 5A

```
package require FAC

set doc [ FAC::CreateDoc ]

set rootHandle [ FAC::CreateRoot $doc "Root" ]

FAC::CreateAttribute $rootHandle "Attr1" "Val1"
FAC::CreateAttribute $rootHandle "Attr2" "Val2"

set child1Handle [ ::FAC::CreateEntity $rootHandle "Child1" ]

FAC::CreateAttribute $child1Handle "cAttr1" "Val1"
FAC::CreateAttribute $child1Handle "cAttr2" "Val2"

set child1inst [ FAC::CreateEntity $rootHandle "Child1" ]

FAC::CreateAttribute $child1inst "cAttr1" "Val3"
FAC::CreateAttribute $child1inst "cAttr2" "Val4"
 set child2Handle [ FAC::CreateEntity $rootHandle "Child2" ]

FAC::CreateAttribute $child2Handle "c2Attr2" "Val1"
FAC::CreateAttribute $child2Handle "c2Attr3" "Val2"

FAC::printDoc $doc "my.xml"
```

↓

Sample Output

```
<?xml version='1.0'?>
<!DOCTYPE Root>
<Root Attr1="Val1" Attr2="Val2">
    <Child1 cAttr2="Val2" cAttr1="Val1"/> <Child1 cAttr2="Val3"
cAttr1="Val4"/>
    <Child2 c2Attr2="Val1" c2Attr3="Val2"/>
</Root>
```

Figure 5B